

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1-36. (Canceled).

37. (New) A communication terminal apparatus, comprising a plurality of layers hierarchically classified depending on different processing functions, said apparatus comprising:
a processing unit belonging to a predetermined layer;
a plurality of processing units belonging to a lower layer than said predetermined layer;
and

an operation control unit for controlling operation of said processing unit belonging to said predetermined layer, said operation control unit belonging to said predetermined layer,
wherein said processing unit belonging to said predetermined layer comprises a data distributor for distributing one supplied data and for outputting a plurality of data,

wherein said processing unit belonging to said predetermined layer can selectively use said plurality of processing units belonging to said lower layer through control of said operation control unit belonging to said predetermined layer,

wherein said operation control unit belonging to said lower layer notifies, to the operation control unit belonging to said lower layer, availability information indicating whether each of said plurality of processing units belonging to said lower layer is available or not,

wherein said operation control unit belonging to said predetermined layer notifies said availability information to said operation control unit belonging to said upper layer, and

said data distributor divides said one data supplied from said processing unit belonging to said upper layer through the control of said operation control unit belonging to said predetermined layer, and a plurality of data after dividing are selectively supplied to said plurality of processing units belonging to said lower layer.

38. (New) The communication terminal apparatus according to claim 37, wherein said operation control unit belonging to said predetermined layer controls a distribution ratio of a plurality of data after said dividing supplied to one or more of the available processing units belonging to said lower layer by said data distributor.

39. (New) A communication terminal apparatus, comprising a plurality of layers hierarchically classified depending on different processing functions, said apparatus comprising:

- a processing unit belonging to a predetermined layer;
- a plurality of processing units belonging to a lower layer than said predetermined layer;
- an operation control unit for controlling operation of said processing unit belonging to said predetermined layer, said operation control unit belonging to said predetermined layer; and
- an operation control unit for controlling operation of each of said plurality of processing units belonging to said lower layer, said operation control unit belonging to said lower layer;

wherein said operation control unit belonging to said lower layer notifies, to said operation control unit belonging to said predetermined layer, availability information to indicate

whether it is possible or not to use each of said plurality of processing units belonging to said lower layer, band information to indicate a band securable in communication using each of said plurality of processing units belonging to said lower layer, and route information to indicate a connection target connectable in the communication using each of said plurality of processing units belonging to said lower layer when said processing unit is available,

wherein said operation unit belonging to said predetermined layer determines which processing unit belonging to said lower layer is connectable to a desired connection target based on the route information, and

wherein said processing unit belonging to said predetermined layer can selectively use said plurality of processing units belonging to said lower layer that is connectable to the desired connection target, through control of said operation control unit belonging to said predetermined layer.

40. (New) The communication terminal apparatus according to claim 39, wherein said operation control unit belonging to said predetermined layer comprises an information requesting section for requesting notification of said band information and/or said route information in addition to said availability information to said operation control unit belonging to said lower layer.

41. (New) The communication terminal apparatus according to claim 39, wherein said operation control unit belonging to said predetermined layer comprises an information storage for

storing said band information and/or said route information in addition to said availability information.

42. (New) The communication terminal apparatus according to claim 39, wherein said operation control unit belonging to said predetermined layer controls selective utilization of one or more of said available processing units belonging to said lower layer by said processing unit belonging to said predetermined layer by referring to said band information and/or said route information in addition to said availability information when said availability information is notified from said operation control unit belonging to said lower layer.

43. (New) The communication terminal apparatus according to claim 39, wherein said apparatus comprises:

a processing unit belonging to a upper layer of said predetermined layer;

an operation control unit for controlling operation of said processing unit belonging to a upper layer of said predetermined layer, said operation control unit belonging to said upper layer; and

said operation control unit belonging to said predetermined layer notifies said band information and/or said route information in addition to said availability information to said operation control unit belonging to said upper layer.

44. (New) The communication terminal apparatus according to claim 43, wherein said processing unit belonging to said predetermined layer comprises a data distributor for distributing a single supplied data and for outputting a plurality of data; and

said data distributor divides said single data supplied from said processing unit belonging to said upper layer through control of said operation control unit belonging to said predetermined layer and supplies a plurality of data after dividing to said plurality of processing units belonging to said lower layer.

45. (New) The communication terminal apparatus according to claim 44, wherein said operation control unit belonging to said predetermined layer refers to said band information and/or said route information, and controls distribution ratio of a plurality of data after said dividing to be supplied by said data distributor to one or more available processing units belonging to said lower layer.

46. (New) The communication terminal apparatus according to any one of claims 37, 38 and 43 to 45, wherein said processing unit belonging to said predetermined layer comprises a data unifying section for unifying a plurality of supplied data and outputting one data; and

said data unifying section unifies said plurality of data supplied from said plurality of processing units belonging to said lower layer and supplies one data after unification to said processing unit belonging to said upper layer.

47. (New) The communication terminal apparatus according to claim 46, wherein said operation control unit belonging to said predetermined layer controls sequence of a plurality of data after dividing as outputted from said data distributor or controls sequence of a plurality of data from said lower layer unified by said data unifying section.

48. (New) A communication control method in a communication terminal apparatus, comprising a plurality of layers hierarchically classified depending on different processing functions, wherein an operation control unit belonging to a predetermined layer among said plurality of layers selectively utilizes a plurality of processing units belonging to a lower layer than said predetermined layer and performs communication when said communication terminal apparatus carries out communication, the communication control method comprising:

a step in which an operation control unit belonging to said lower layer controls so that availability information is notified to said operation control unit belonging to said predetermined layer, said information indicating whether it is possible or not to utilize each of said plurality of processing units belonging to said lower layer;

a step in which an operation control unit belonging to said predetermined layer controls so that said availability information is notified to the operation control unit belonging to an upper layer of said predetermine layer; and

a step in which said processing unit belonging to said predetermined layer divides said one data supplied from the processing unit belonging to said upper layer and controls so that a plurality of data after dividing is selectively supplied to said plurality of processing units belonging to said lower layer.

49. (New) The communication control method according to claim 48, further comprising a step in which said operation control unit belonging to said predetermined layer controls a distribution ratio of a plurality of data after said dividing to be supplied to one or more available processing units belonging to said lower layer by said processing unit of said predetermined layer.

50. (New) A communication control method in a communication terminal apparatus, comprising a plurality of layers hierarchically classified depending on different processing functions, wherein an operation control unit belonging to a predetermined layer among said plurality of layers selectively utilizes a plurality of processing units belonging to a lower layer than said predetermined layer and performs communication when said communication terminal apparatus carries out communication, the communication control method comprising:

a step in which said operation control unit belonging to said lower layer notifies, to said operation control unit belonging to said predetermined layer, availability information to indicate whether it is possible or not to use each of said plurality of processing units belonging to said lower layer, band information to indicate a band securable in communication using each of said plurality of processing units belonging to said lower layer, and route information to indicate connection target connectable in the communication using each of said plurality of processing units belonging to said lower layer when said processing unit is available,

a step in which said operation unit belonging to said predetermined layer determines which processing unit belonging to said lower layer is connectable to a desired connection target based on the route information, and

a step in which said processing unit belonging to said predetermined layer can selectively use said plurality of processing units belonging to said lower layer that is connectable to the desired connection target, through control of said operation unit belonging to said predetermined layer.

51. (New) The communication control method according to claim 50, further comprising a step in which said operation control unit belonging to said predetermined layer controls so that notification of said band information and/or said route information is requested in addition to said availability information to said operation control unit belonging to said lower layer.

52. (New) The communication control method according to claim 50, further comprising a step in which said operation control unit belonging to said predetermined layer stores said band information and/or said route information in addition to said availability information to a predetermined information storage.

53. (New) The communication control method according to claim 50, further comprising a step in which said operation control unit belonging to said predetermined layer controls selective utilization of one or more of said available processing units belonging to said

lower layer by said processing unit belonging to said predetermined layer by referring to said band information and/or said route information in addition to said availability information when said availability information is notified from said operation control unit belonging to said lower layer.

54. (New) The communication control method according to claim 50, further comprising a step in which said operation control unit belonging to said predetermined layer controls so that said band information and/or said route information is notified in addition to said availability information to the operation control unit belonging to an upper layer of said predetermined layer.

55. (New) The communication control method according to claim 54, further comprising a step in which said processing unit belonging to said predetermined layer divides said one data supplied from the processing unit belonging to said upper layer and controls so that a plurality of data after said dividing is selectively supplied to said plurality of processing units belonging to said lower layer.

56. (New) The communication control method according to claim 55, further comprising a step in which said operation control unit belonging to said predetermined layer refers to said band information and/or said route information and controls distribution ratio of a plurality of data after said dividing supplied to one or more available processing units belonging to said lower layer by said processing unit of said predetermined layer.

57. (New) The communication control method according to any one of claims 48, 49 and 54 to 56, further comprising a step in which said processing unit belonging to said predetermined layer unifies said plurality of data supplied from said plurality of processing units belonging to said lower layer and controls so that one data after said dividing is supplied to said processing unit belonging to said upper layer.

58. (New) The communication control method according to claim 57, further comprising a step in which said operation control unit belonging to said predetermined layer controls sequence of a plurality of data after said dividing as outputted from the processing unit belonging to said predetermined layer or controls sequence of a plurality of data from said lower layer unified by said processing unit belonging to said predetermined layer.